

WHAT IS CLAIMED IS:

1. A data recording apparatus comprising:

data recording means for recording data on a recording medium;

management information recording means for recording management information of the data onto the recording medium or a non-volatile memory; and

a system controller for managing the management information and for controlling the data recording means and the management information recording means; wherein

the system controller periodically records the management information onto the recording medium or the non-volatile memory.

2. A data recording method, wherein management information of data to be recorded onto a recording medium is generated, and the management information is periodically recorded onto the recording medium or a non-volatile memory.

3. A data recording/reproducing apparatus for recording or reproducing content data onto a disc-like recording medium, comprising:

management means for generating management information to be recorded onto the disc-like recording medium; and

control means for performing recording/reproducing control on the disc-like recording medium; wherein

first and second management areas for storing management information and a procedure storage area for storing recording procedure of recording management

information into each of the management areas, and

the control means records same management information into the first and second management areas, and records information indicating that writing of management information onto the first management area is started and information indicating that writing of management information onto the second area is started, into the procedure storage area.

4. The data recording/reproducing apparatus according to claim 3, wherein the control means reproduces management information from either the first or second management area, based on the recording procedure information stored in the procedure storage area.

5. The data recording/reproducing apparatus according to claim 3, wherein the control means records information indicating that writing of management information onto the first management area is started onto the procedure storage area, records the management information onto the first management area, records information indicating that writing of management information onto the second storage area is started onto the procedure storage area, records same management information as the management information recorded onto the first management information, onto the second management area, and deletes information recorded on the procedure storage area when recording onto the second management area ends.

6. The data recording/reproducing apparatus according to claim 5, wherein the control means reproduces management information from the second management

area if the information indicating that the writing of management information onto the first management area is started is recorded in the procedure storage area, and the control means reproduces management information from the first management area if the information indicating that the writing of management information onto the second management area is started is recorded in the procedure storage area.

7. The data recording/reproducing apparatus according to claim 3, wherein the management information is management information of the file system of the disc-like recording medium.

8. The data recording/reproducing apparatus according to claim 3, wherein the management information is content data management information for managing content data recorded on the disc-like recording medium.

9. A data recording/reproducing apparatus for recording or reproducing content data onto or from a disc-like recording medium, comprising:

a file system for generating management information of a file system of the disc-like recording medium;

file management means for generating file management information of content data to be recorded onto the disc-like recording medium; and

control means for control of recording/reproducing with respect to the disc-like recording medium; wherein

first and second file system management areas for storing management information of the file system, first and second content data management areas for

storing management information of content data, a first procedure storage area for storing recording procedure information of recording onto each of the file system management areas, and a second procedure storage area for storing recording procedure information onto the content data management areas are provided in the disc-like recording medium, and

the control means records same file system management information onto the first and second file system management areas, records same content data management information onto the first and second content data management areas, records information indicating that writing of the file system management information onto the first file system management area is started as well as information indicating that writing of the file system management information onto the second file system management area is started, onto the first procedure storage area, and records information indicating that writing of the content data management information onto the first content data management area is started as well as information indicating that writing of the content data management information onto the second content data management area is started, onto the second procedure storage area.

10. The data recording/reproducing apparatus according to claim 9, wherein the control means reproduces the file system management information from either one of the first and second file system management areas, based on the recording procedure information stored in the first procedure storage area, and reproduces the content data management information from either one of the first and second content

data management areas, based on the recording procedure information stored in the second procedure management area.

11. A data recording/reproducing method for recording or reproducing content data onto or from a disc-like recording medium, wherein

management information to be recorded onto the disc-like recording medium is generated,

first and second management areas for storing the management information and a procedure storage area for storing recording procedure information the management information onto the management areas are provided on the disc-like recording medium, and

same management information is recorded onto the first and second management areas, and information indicating that writing of management information onto the first management area is started and information indicating that writing of management information onto the second management area is started are recorded onto the procedure storage area.

12. The data recording/reproducing method according to claim 11, wherein management information is reproduced from either the first or second management area, based on the recording procedure information stored in the procedure storage area.

13. The data recording/reproducing method according to claim 11, wherein information indicating that writing of management information onto the first

management area is started is recorded onto the procedure storage area,  
the management information is recorded onto the first management area,  
information indicating that writing of management information onto the second  
storage area is recorded onto the procedure storage area,  
same management information as the management information recorded onto  
the first management area is recorded onto the second management area, and  
information recorded on the procedure storage area is deleted when recording  
onto the second management area ends.

14. The data recording/reproducing method according to claim 13, wherein  
management information is reproduced from the second management area if the  
information indicating that writing of management information onto the first  
management area is started is recorded on the procedure storage area, and

management information is reproduced from the first management area if the  
information indicating that writing of management information onto the second  
management area is recorded on the procedure storage area.

15. The data recording/reproducing method according to claim 11, wherein  
the management information is management information of a file system of the disc-  
like recording medium.

16. The data recording/reproducing method according to claim 11, wherein  
the management information is content data management information for managing  
content data to be recorded onto the disc-like recording medium.

17. A data recording/reproducing method for recording or reproducing content data onto or from a disc-like recording medium, wherein

first and second file system management areas for storing management information of a file system, first and second content data management areas for storing management information of content data, a first procedure storage area for storing recording procedure information onto each of the file system management areas, and a second procedure storage area for storing recording procedure information onto the content data management areas are provided on the disc-like recording medium,

management information of the file system of the disc-like recording medium is generated,

file management information of content data to be recorded onto the disc-like recording medium is generated,

same file system management information is recorded onto the first and second file system management areas,

same content data management information is recorded onto the first and second content data management areas,

information indicating that writing of file system management information onto the first file system management area is started and information indicating that writing of file system management information onto the second file system management area is started are recorded onto the first procedure storage area, and

information indicating that writing of content data management information onto the first content data management area is started and information indicating that writing of content data management information onto the second content data management area is started are recorded onto the second procedure storage area.

18. The data recording/reproducing method according to claim 17, wherein file system management information is reproduced from either the first or second file system management areas, based on the recording procedure information stored in the first procedure storage area, and content data management information is reproduced from either the first or second content data management areas, based on the recording procedure information stored in the second procedure management area.

19. A disc-like recording medium onto which content data is recorded, comprising:

first and second management areas provided for storing management information of content data to be recorded; and

a procedure storage area provided for storing recording procedure information management information onto each of the management areas, wherein

same management information is recorded onto the first and second management areas, and information indicating that writing of management information onto the first management area is started and information indicating that writing of management information onto the second management area are recorded onto the procedure management area.



20. A disc-like recording medium onto which content data is recorded, comprising:

first and second file system management areas for storing management information of the file system;

first and second content data management areas for storing management information of content data to be recorded;

a first procedure storage area for storing recording procedure information onto each of the file system management areas; and

a second procedure storage area for storing recording procedure information onto the content data management areas, wherein

same file system management information is recorded onto the first and second management areas,

same content data management information is recorded onto the first and second content data management areas,

information indicating that writing of file system management information onto the first file system management area is started and information indicating that writing of file system management information onto the second file system management area is started are recorded onto the first procedure management area, and

information indicating that writing of content data management information onto the first content data management area is started and information indicating that writing of content data management information onto the second content data

management area is started are recorded onto the second procedure management area.